

REMARKS

Applicant thanks the Examiner for the careful consideration given to this application. Reconsideration is now respectfully requested in view of the amendment above and the following remarks.

Claims 1-38 are pending in this application. Claims 1 and 19 are independent claims. Reconsideration and allowance of the present application are respectfully requested.

Entry of Amendment After Final Rejection

Entry of the Amendment is requested under 37 C.F.R. § 1.116 because the Amendment: a) places the application in condition for allowance for the reasons discussed herein; b) does not present any additional claims without canceling the corresponding number of final rejected claims; and/or c) places the application in better form for an appeal, if an appeal is necessary. Entry of the Amendment is thus respectfully requested.

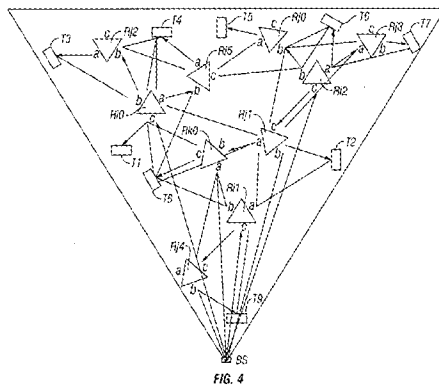
Claim Rejections Under 35 U.S.C. §103

Claims 1-7, 12-25 and 30-37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2007/0184828 to Majidi-Ahy (hereinafter “Majidi”) in view of U.S. Patent Publication No. 2003/0104781 to Son (hereinafter “Son”), in further view of U.S. Patent No. 6,728,514 to Bandeira et al. (hereinafter “Bandeira”), and in further view of U.S. Patent No. 6,400,697 to Leung et al. (hereinafter “Leung”). Claims 8-11 and 26-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Majidi, in view of Son, in further view of Bandeira, in further view of Leung and in further view of U.S. Patent No. 6,973,312 to Ngan et al. (hereinafter “Ngan”). Claim 38 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Majidi, in view of Son, in further view of Bandeira, in further view of Leung and in further view of U.S. Patent Publication No. 2004/0169612 to Song et al. (hereinafter “Song”). These rejections are respectfully traversed for at least the following reasons.

Obviousness is a question of law that is evaluated based on underlying factual questions about the level of skill in the art at the time the invention was made, the scope and content of the prior art, and the differences between the prior art and the asserted claim. *KSR Int’l Co. v.*

Teleflex, Inc., 127 S.Ct. 1727 at 1734, 1745 (2007), (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966)). The Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). Applicant may traverse the Examiner's *prima facie* determination as improperly made out. *In re Heldt*, 58 C.C.P.A. 701, 433 F.2d 808, 811, 167 USPQ 676, 678 (CCPA 1970). Applicant submits a *prima facie* case of obviousness is lacking, at least by virtue that the cited references fail, in any combination, to teach each of the limitations of any of the pending claims.¹

In certain embodiments of the present invention, each base station in a mesh access network consists of six sectors. *See, Specification, pg. 2 par. [0039]*. A sector consists of a large number of indoor terminal nodes, some outdoor terminal nodes, and a small number of outdoor repeaters. *Id.* As shown in Fig. 4 of the specification, a typical sector has level-1, level-2, and level-3 repeaters (shown as triangles, and associated terminals (shown as rectangles)).



Data packets from the base-station to a node are switched to the node through multiple hops. *See, Specification, pg. 2, par. [0041]*. Similarly, data packets from a node are transmitted through multiple hops to the base-station. *Id.* Repeaters serve to facilitate these hops. *Id.* For example, in certain embodiments of the invention, the number of hops may be limited to four, *i.e.*, base station → repeater 1 → repeater 2 → repeater 3 → terminal. *Id.*

¹ The following discussion identifies exemplary reference characters, and/or references particular portions of the disclosure. Such identification and/or references do not constitute a representation that any claim element is limited

Consistently, Claim 1 recites, *inter alia*:

A mesh access network, comprising:
 at least one base-station comprising a plurality of sectors;
each sector comprising:
 indoor terminal nodes each comprising an antenna;
 outdoor terminal nodes each comprising an antenna; and
 a plurality of outdoor repeaters, wherein said indoor and outdoor terminal nodes and repeaters in each section are arranged in a tree structure starting from said base-station, wherein said base-station sectors use different frequency bands that are located in alternate sectors of said base-station; and
 a module for interference management and sector reuse comprising network management of frequency, time, and directionality. (*Emphasis added*)

Majidi, Son, Bandeira, and Leung fail in any combination to teach such a network.

The November 13, 2009 Office action acknowledges Majidi does not teach or suggest ***indoor and outdoor terminal nodes***. See, 11/13/09, Office action, pg. 5. The July 8, 2010 Office action omits any reference to outdoor terminal nodes, as is recited by Claim 1. Nonetheless, the July 8, 2010 Office action references select portions of Son in an effort to remedy the admitted shortcomings of Majidi's purported teachings. See, 7/8/2010, Office action, pg. 3. Applicant requests reconsideration and withdrawal of these rejections for at least the following reasons.

Like Majidi, the select portions of Son do not teach or suggest "***outdoor terminal nodes each comprising an antenna***." Instead, the select portions of Son merely disclose an outdoor repeater communicating with a base station, and an indoor repeater communicating with an indoor mobile phone unit. See, Son, par. [0013], Fig. 4.

Even assuming, *arguendo*, Son's teachings of "an outdoor repeater communicating with a base station, and an indoor repeater communicating with an indoor mobile phone unit, equates to indoor terminal nodes and outdoor repeaters," the combination of Majidi and Son still fail to teach or suggest the recited "***outdoor terminal nodes***."

For purposes of completeness, Applicant notes neither Bandeira nor Leung references used in the 35 U.S.C. §103 rejections are applied in these regards.

Accordingly, Majidi, Son, Bandeira, and Leung fail both individually, and in any combination to teach or suggest “outdoor terminal nodes each comprising an antenna,” as is recited by Claim 1.

Wherefore, Applicant requests reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of Claim 1. Applicant also requests reconsideration and withdrawal of the rejections of Claims 2-18, and 37-38 as well, at least by virtue of these claims’ ultimate dependency upon base Claim 1. *See, 35 U.S.C. §112, par. 4 (“[a] claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.”).*

Turning to Claim 19, while different in scope, it analogously recites, *inter alia*, “outdoor terminal nodes each comprising an antenna.”

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of Claim 19 for at least the foregoing reasons as well. Applicant also requests reconsideration and withdrawal of the rejections of Claims 20 - 36, at least by virtue of these claims’ ultimate dependency upon base Claim 19.

Disclaimer

Applicant may not have presented all possible arguments or have refuted the characterizations of either the claims or the prior art as found in the Office Action. However, the lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

CONCLUSION

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 27592-00912-US from which the undersigned is authorized to draw.

Dated: September 3, 2010

Respectfully submitted,

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